

AMENDMENTS TO THE CLAIMS

1-35. (Cancelled)

36. (NEW) A web fabrication process for manufacturing a plurality of light-emitting panels, the process comprising:

providing a first substrate;

disposing a plurality of micro-components on the first substrate, each micro-component emitting light when exposed to a triggering voltage;

disposing a second substrate on the first substrate such that the plurality of micro-components are disposed between the first substrate and the second substrate; and

dicing the first and second substrates to form the plurality of light-emitting panels.

37. (NEW) The process of claim 36, wherein providing the first substrate comprises pulling a web of the first substrate off of a roll.

38. (NEW) The process of claim 36, wherein further comprising forming a plurality of sockets in the first substrate.

39. (NEW) The process of claim 36, further comprising disposing at least two electrodes by each of the micro-components.

40. (NEW) The process of claim 39, wherein disposing comprises placing the two electrodes to apply a voltage across each micro-component.

41. (NEW) The process of claim 40, wherein placing the two electrodes comprises placing the two electrodes so that each micro-component emits radiation when the triggering voltage is provided to the two electrodes.

42. (NEW) The process of claim 36, further comprising forming a plurality of sockets in the first substrate and wherein disposing the plurality of micro-components comprises disposing each micro-component at least partially within each socket.

43. (NEW) The process of claim 42, wherein providing the first substrate comprises forming the first substrate with a plurality of material layers and forming the plurality of sockets comprises selectively removing portions of the material layers to form a plurality of cavities.

44. (NEW) The process of claim 42, wherein forming the plurality of sockets comprises patterning the first substrate with a plurality of cavities.

45. (NEW) The process of claim 44, further comprising disposing a material layer on the first substrate so that the material layer conforms to a shape of each socket and disposing at least one electrode between the first substrate and the material layer.

46. (NEW) The process of claim 44, further comprising disposing a plurality of material layers on the first substrate so that the plurality of material layers conform to a shape of each socket and disposing at least one electrode within the plurality of material layers.

47. (NEW) The process of claim 42, wherein providing the first substrate comprises forming the first substrate by disposing a plurality of material layers and forming the plurality of sockets comprises selectively removing portions of the material layers to form a plurality of cavities.

48. (NEW) The process of claim 47, further comprising disposing an electrode on at least one of the first substrate and the second substrate.

49. (NEW) The process of claim 48, wherein the electrode is disposed between two material layers of the plurality of material layers.

50. (NEW) The process of claim 48, further comprising disposing an enhancement material near each socket.

51. (NEW) The process of claim 50, wherein disposing the enhancement material comprises disposing a passive electrical component.

52. (NEW) The process of claim 50, wherein disposing the enhancement material comprises:

suspending the enhancement material in a liquid; and
flowing the liquid over the first substrate such that the enhancement material settles in each socket.

53. (NEW) The process of claim 50, wherein disposing the enhancement material comprises disposing the enhancement material to be aligned with a shape of the sockets.

54. (NEW) The process of claim 36, further comprising providing control electronics for the light-emitting panels.

55. (NEW) The process of claim 36, wherein providing the first substrate, disposing the plurality of micro-components, disposing the second substrate, and dicing the first and second substrates is performed as a continuous high-speed inline process.

56. (NEW) The process of claim 36, wherein providing the second substrate comprises pulling a web of the second substrate off of a roll.

57. (NEW) The process of claim 50, wherein disposing the enhancement material comprises disposing an active electrical component.

58. (NEW) A web fabrication process for manufacturing a plurality of light-emitting panels, comprising:

providing a first substrate comprising a plurality of channels; and

weaving a single micro-component through the plurality of channels, the micro-component having a cylindrical shape and emitting radiation when exposed to a trigger voltage.

59. (NEW) The process of claim 58, wherein the channels comprise a plurality of ends and the process further comprises heating the micro-component to allow the micro-component to bend around the end of each channel.

60. (NEW) The process of claim 58, further comprising weaving a plurality of micro-components, wherein each micro-component emits a specific color of visible light when exposed to the trigger voltage.

61. (NEW) The process of claim 58, further comprising coating each channel with a specific color phosphor.